

Relevance Only

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Rooth (1985) analyzes *only* as follows (neglecting the assertion/presupposition distinction and assuming that ϕ is of type t):

$$(1) \llbracket \text{only } \phi \rrbracket = \{w \in \llbracket \phi \rrbracket : \neg \exists p \in \llbracket \phi \rrbracket_A : w \in p \text{ and } p \neq \llbracket \phi \rrbracket\}$$

For this to be an acceptable rule, it is crucial to limit what the alternatives to ϕ are. It has been argued by various authors that the rule makes sense only in case the alternatives to ϕ differ from ϕ only in a constituent of type e : only in that case it can be (naturally) assumed that the alternatives are *independent* of one another. In case *groups* of individuals are treated on a par with a ‘real’ individual like John, however, even this limitation is not strong enough anymore. Assuming that groups can be denotations of discourse referents, something like the following has been proposed by Zeevat (1994) and Butler (2002):

$$(2) \llbracket \text{only } \phi \rrbracket = \{w \in \llbracket \phi \rrbracket : \neg \exists p \in \llbracket \phi \rrbracket_A : w \in p \text{ and } p \subset \llbracket \phi \rrbracket\}$$

Actually, they are not using alternative semantics, of course, and use more something like a background-focus structure. Also, their analysis is not an analysis of ‘only’, but rather one of *exhaustification*. Assume a sentence is of the form $\langle B, F \rangle$, and remember the special treatment of indefinites in dynamic theories. Then they treat the exhaustification of $\langle B, F \rangle$, $\text{exh}\langle B, F \rangle$, more along the following lines:

$$(3) \llbracket \text{exh}\langle B, F \rangle \rrbracket = \{w \in \llbracket B(x) \rrbracket : x = F(w) \ \& \ \neg \exists y [B(y)(w) \ \& \ \llbracket B(y) \rrbracket \subset \llbracket B(x) \rrbracket]\}$$

Bonomi & Casalegno (1993) have argued in the last part of their paper that ‘only’ can also have a ‘scalar’ reading where it rules out alternatives that are ‘higher’ on a certain scale. They propose (something like) (4a). For exhaustification something similar holds, i.e. (4b):

$$(4) \text{ a. } \llbracket \text{only } \phi \rrbracket = \{w \in \llbracket \phi \rrbracket : \neg \exists p \in \llbracket \phi \rrbracket_A : w \in p \text{ and } p < \llbracket \phi \rrbracket\}$$

$$\text{ b. } \llbracket \text{exh}\langle B, F \rangle \rrbracket = \{w \in \llbracket B(x) \rrbracket : x = F(w) \ \& \ \neg \exists y [B(y)(w) \ \& \ \llbracket B(y) \rrbracket < \llbracket B(x) \rrbracket]\}$$

I will argue that to interpret **free focus** the latter rule is the basic one,¹ but also that the ordering relation $<$ is always one of **relevance**: in w , $\llbracket B(x) \rrbracket$ is the most relevant true proposition among the alternatives. Optimizing relevance simply means optimizing *utility*, but how utility should be measured depends on the goals and beliefs of the participants of the conversation. To account for the cases discussed by Bonomi & Casalegno utility comes down naturally to *argumentative* value, as proposed by Merin (1999). In other cases utility can be reduced to *entropy reduction*: the answer given is the most useful true answer to resolve the questioner’s question/decision problem. Both naturally give rise to an ordering induced by entailment, deriving Zeevat’s interpretation rule as a special case.

I will also argue that the analysis of **only** should, in general, *not* be treated in the same way: answering question *Who comes?* by *John* can select a mention-some reading as its most relevant one, while this is not the case for answer *Only John*. I will suggest that *only* should be analyzed more along the lines of Groenendijk & Stokhof’s (1984) analysis of exhaustivity, improved upon in the first part of Bonomi & Casalegno (1993).

¹the second conjunct as implicature, perhaps.

References

- [1] Bonomi & Casalengno (1993), ‘Only: association with focus in event semantics’.
- [2] Butler, A. (2002), PhD dissertation..
- [3] Merin, A. (1999), ‘Information, relevance, and social decisionmaking’, *Logic, Language, and Computation, Vol. 2*, In L. Moss et al. (eds.), CSLI publications: Stanford.
- [4] Rooth (1985), *Association with focus*, PhD dissertation, Amherst.
- [5] Zeevat, H. (1994), ‘Questions and Exhaustivity in Update Semantics’, In *Proceedings of the International Workshop on Computational Semantics*, Bunt et al. (eds.), Institute for Language Technology and Artificial Intelligence, Tilburg.